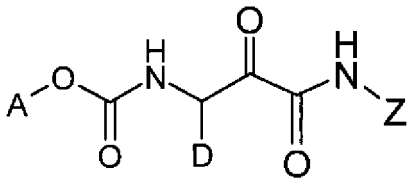
AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A compound of Formula (I):



(I)

or a salt or solvate thereof:
wherein

A is the group defined by (Q^3)-$(Q^2)_n$-(Q^1)-$(Q)_m$-, wherein

Q is CH_2 and m is 0, 1, or 2

Q^1 is C_3-C_7 cycloalkylene;

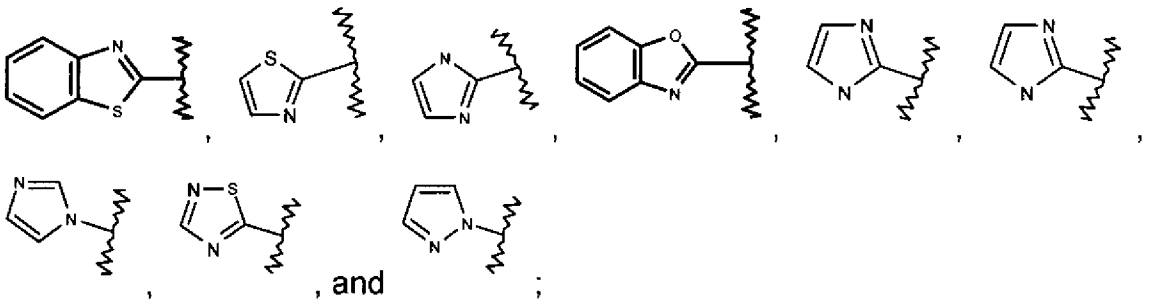
Q^2 is C_1-C_3 alkylene and n is 0 or 1, or

Q^2 is OR, where R is C_1-C_3 alkylene and n is 1,

Q^2 is SR, where R is C_1-C_3 alkylene and n is 1; or

Q^2 is N(R')R, where R' is hydrogen or C_1-C_6 alkyl, R is C_1-C_3 alkylene and n is 1; and

Q^3 is aryl, heteroaryl, or aryl or heteroaryl substituted with at least one independently selected R^1 group, wherein said heteroaryl is selected from the group consisting of



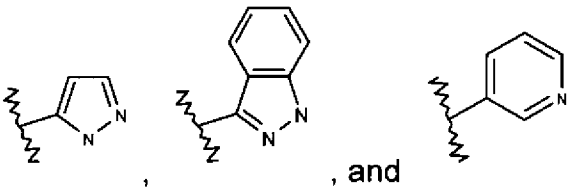
D is C_1-C_6 alkyl or C_1-C_6 alkyl substituted with $-NR^2R^3$;

Z is the group defined by $-(X)_p-(X^1)_q-(X^2)$, wherein

X is C(R')(R''), wherein R' is hydrogen or C_1-C_6 alkyl, R'' is hydrogen and C_1-C_6 alkyl, and p is 0, 1, or 2,

X^1 is $C(O)OCH_2$, wherein q is 0 or 1, and

X^2 is aryl, heteroaryl, or heterocyclyl wherein said ~~hteroaryl~~ heteroaryl or heterocyclyl is selected from:



R^1 is halo, C_1-C_6 alkyl, aryl, or C_1-C_6 haloalkyl;

R^2 is hydrogen or C_1-C_6 alkyl;

R^3 is hydrogen, C_1-C_6 alkyl, $-C(O)R^4$, or $-S(O)_2NR^5R^6$;

R^4 is $-NR^5R^6$, and

R^5 and R^6 are independently selected from hydrogen or C_1-C_6 alkyl.

2-4. (Cancelled)

5. (Original) A compound as claimed in claim 1, wherein Q is CH_2 and m is 0, 1, or 2.

6. (Original) A compound as claimed in claim 1, wherein Q is CH_2 and m is 0 or 1.

7. (Original) A compound as claimed in claim 1, wherein Q is CH_2 and m is 1.

8. (Original) A compound as claimed in claim 1, wherein Q^1 is C_3-C_7 cycloalkylene.

9. (Original) A compound as claimed in claim 1, wherein Q^1 is selected from the group cyclobutylene, cyclopentylene or cyclohexylene,

10. (Original) A compound as claimed in claim 1, wherein Q^1 is cyclobutylene.

11. (Original)A compound as claimed in claim 1, wherein Q^2 is C_1-C_3 alkylene and n is 0 or 1.

12. (Original) A compound as claimed in claim 1, wherein Q^2 is C_1-C_3 alkylene and n is 1.

13. (Original) A compound as claimed in claim 1, wherein Q^2 is OR, wherein R is C_1-C_3 alkylene and n is 1.

14. (Original) A compound as claimed in claim 1, wherein Q^2 is SR, wherein R is C_1-C_3 alkylene and n is 1.

15. (Original) A compound as claimed in claim 1, wherein Q^3 is aryl or aryl substituted with at least one independently selected R^1 group.

16. (Original) A compound as claimed in claim 1, wherein Q^3 is phenyl or phenyl substituted with at least one independently selected R^1 group wherein R^1 is halo or C_1-C_6 alkyl.

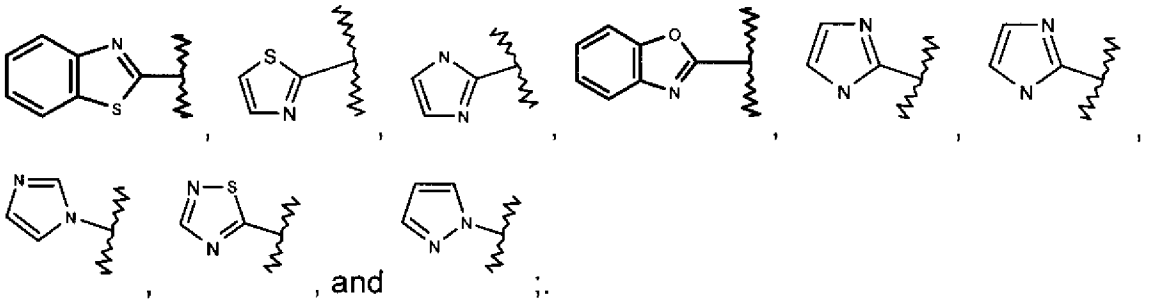
17. (Original) A compound as claimed in claim 16, wherein R^1 is halo.

18. (Cancelled)

19. (Original) A compound as claimed in claim 16, wherein R^1 is C_1-C_6 alkyl.

20. (Cancelled)

21. (Previously presented) A compound as claimed in claim 1, wherein Q^3 is heteroaryl or heteroaryl substituted with at least one independently selected R^1, wherein said heteroaryl is selected from the group consisting of



, and ;.

22-27 . (Cancelled)

28. (Original) A compound as claimed in claim 1, wherein D is C_1-C_6 alkyl.

29. (Original) A compound as claimed in claim 1, wherein D is n-butyl.

30-33 (Cancelled)

34. (Original) A compound as claimed in claim 1, wherein X is C(H)(R") where R" is hydrogen and p is 0, 1, or 2.

35. (Original) A compound as claimed in claim 1, wherein X is C(R')(R") where R" is hydrogen and p is 0, 1, or 2.

36. (Original) A compound as claimed in claim 1, wherein X is C(H)(R") where R" is hydrogen and p is 0 or 1.

37. (Original) A compound as claimed in claim 1, wherein X is C(H)(R") where R" is hydrogen and p is 0.

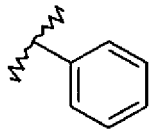
38. (Original) A compound as claimed in claim 1, wherein X is C(H)(R") where R" is $-CH_3$ and p is 1.

39. (Original) A compound as claimed in claim 1, wherein X^1 is $C(O)OCH_2$, wherein q is 1.

40. (Original) A compound as claimed in claim 1, wherein X^1 is $C(O)OCH_2$, wherein q is 0.

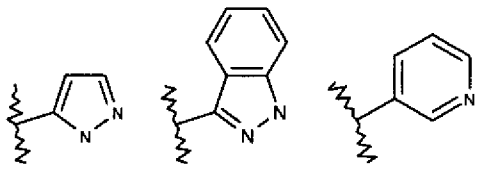
41. (Original) A compound as claimed in claim 1, wherein X^2 is aryl.

42. (Original) A compound as claimed in claim 1, wherein X^2 is



43. (Cancelled)

44. (Original) A compound as claimed in claim 1, wherein X^2 is selected from the group



, or substituted derivatives thereof.

45. (Previously presented) A compound selected from the group consisting of:

1-benzylcyclobutyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;

1-benzylcyclopentyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;

benzyl(2S)-2-{[(3S)-3-({[(1-benzylcyclopentyl)oxy]carbonyl}amino)-2-oxoheptanoyl]amino}propanoate;

1-benzylcyclohexyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;

(1-Benzylcyclobutyl)methyl(1S)-1-(oxo{[(1R)-1-phenylethyl]amino} acetyl) pentyl carbamate;

[1-(2-Phenylethyl)cyclobutyl]methyl (1S)-1-(oxo{[(1R)-1-phenylethyl] amino} acetyl) pentylcarbamate;

[1-(3-Phenylpropyl)cyclobutyl]methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino} acetyl) pentylcarbamate;

(1-Benzylcyclopentyl)methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl) pentyl carbamate;

[1-(2,6-difluorobenzyl)cyclobutyl]methyl (1S)-5-{[(methylamino)carbonyl]amino}-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;

[1-(4-Fluorobenzyl)cyclobutyl]methyl (1S)-1-[oxo(1H-pyrazol-5-ylamino)acetyl] pentylcarbamate;

[1-(4-fluorobenzyl)cyclobutyl]methyl (1S)-1-[[(6-chloro-1H-indazol-3-yl)amino](oxo) acetyl]pentylcarbamate;

[1-(4-fluorobenzyl)cyclobutyl]methyl (1S)-5-{[(dimethylamino)sulfonyl]amino}-1-{oxo[(3-pyridinylmethyl)amino]acetyl}pentylcarbamate;

1-(1,3-Benzothiazol-2-yl)cyclopentyl (1S)-1-[oxo(1H-pyrazol-3-ylamino)acetyl] pentylcarbamate;

{1-[(4-phenyl-1,3-thiazol-2-yl)methyl]cyclobutyl}methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;

(1-{[(1-methyl-1H-imidazol-2-yl)sulfanyl]methyl}cyclobutyl)methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;

{1-[(1,3-benzoxazol-2-ylsulfanyl)methyl]cyclobutyl}methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;

{1-[(1,3-thiazol-2-yloxy)methyl]cyclobutyl}methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;

(1-{[(3-phenyl-1,2,4-thiadiazol-5-yl)oxy]methyl}cyclobutyl)methyl (1S)-1-(oxo {[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;

(1-{[(1-phenyl-1H-imidazol-2-yl)sulfanyl]methyl}cyclobutyl)methyl (1S)-1-(oxo {[(1R)-1- phenylethyl]amino}acetyl)pentylcarbamate;

[1-({[4-(4-methylphenyl)-1,3-thiazol-2-yl]oxy}methyl)cyclobutyl]methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;

[1-({[5-(4-chlorophenyl)-1-methyl-1H-imidazol-2-yl]sulfanyl}methyl) cyclobutyl] methyl (1S)-1-(oxo{[(1R)-1-phenylethyl] amino} acetyl)pentylcarbamate;

{1-[(4-methyl-1,3-thiazol-2-yl)methyl]cyclobutyl}methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;

(1-{2-[(1-methyl-1H-imidazol-2-yl)sulfanyl]ethyl}cyclobutyl)methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate; and

(1-{3-[(1-methyl-1H-imidazol-2-yl)sulfanyl]propyl}cyclobutyl)methyl (1S)-1-(oxo{[(1R)-1- phenylethyl]amino}acetyl)pentylcarbamate;

or a salt or solvate thereof.

46. (Previously presented) A pharmaceutical composition comprising a therapeutically effective amount of a compound as claimed in claim 1 or a salt or solvate thereof and one or more of pharmaceutically acceptable carriers, diluents and excipients.

47. (Currently amended) A method of treating a disorder selected from osteoporosis, Paget's disease, hypercalcemia of malignancy, metabolic bone disease, osteoarthritis, rheumatoid arthritis, periodontitis, gingivitis, atherosclerosis, and neoplastic diseases associated with cathepsin K activity in a mammal, ~~said disorder being characterized by enhanced bone turnover which can ultimately lead to fracture~~, comprising: administering to said mammal a therapeutically effective amount of a compound as claimed in claim 1 or a salt or solvate thereof.

48-50. (Cancelled)

51. (Previously presented) A method of treating osteoporosis, comprising: administering to said mammal a therapeutically effective amount of a compound as claimed in claim 1 or a salt or solvate thereof.

52. (Previously presented) A method of treating osteoporosis, comprising: administering to said mammal therapeutically effective amounts of (i) a compound as claimed in claim 1, or a salt or solvate thereof and (ii) at least one bone building agent.